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**PROPOSED POLICY
AND PROCEDURES
FOR
FISH HABITAT
MANAGEMENT**

MAY 31, 1985

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**PROPOSED POLICY AND PROCEDURES
FOR
FISH HABITAT MANAGEMENT**

**DEPARTMENT OF FISHERIES AND OCEANS
OTTAWA, ONTARIO**

MAY 31, 1985



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EXPLANATORY NOTE

These proposed policy and procedures for fish habitat management were developed by the Department of Fisheries and Oceans following public consideration of a discussion paper during a seven-month period in 1983-84.

Interested parties are now invited to study the document and to make their views known to the Minister of Fisheries and Oceans in Ottawa before the end of July, 1985.

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EXECUTIVE SUMMARY

The Minister of Fisheries and Oceans is responsible for administering important sections of the Fisheries Act relating to the protection of fish habitats, comprising those parts of the aquatic environment, such as spawning gravel, migration routes, food supply areas and water quality, on which fish depend for their growth and survival. These areas are an integral part of the renewable fisheries resource that provides social and economic benefits to Canadians.

Until now, there has been no well-defined departmental policy and procedural document on fish habitat management to inform those who undertake projects and activities in or near the water, and to guide departmental staff. This document is the outcome of extensive consultations with a large number of interested parties across Canada. The Department of Fisheries and Oceans recognizes the potential impact of fish habitat decisions on regional and industrial development, and will strive under this policy to take reasonable and consistent decisions to protect productive fish habitat, in the face of conflicting demands for use of the aquatic environment.

Furthermore, the fish habitat management policy will support other federal fisheries objectives for the conservation and management of Canada's fisheries resources. This supportive link will be achieved by instituting a process called habitat management area planning, a process that would allow the department to account for the condition of fish habitat... for gains and losses, for opportunities and dangers... and to relate the habitat to fisheries production objectives. All other water users, land users and other interested parties in the area would be consulted to share information and to contribute to the formulation of the habitat management plan.

The policy outlines the department's position on a number of important questions, as they relate to habitat, including:

- (a) the maintenance of natural fish production, wherever possible;
- (b) the willingness to consider proposals to compensate for potential losses of habitat;
- (c) the need for public consultation, especially for projects with major potential impacts;
- (d) the legal requirement for proponents to provide habitat impact studies, at their expense;
- (e) the department's willingness to provide advice in resolving minor habitat problems associated with small projects; and
- (f) the opportunity to have DFO habitat decisions reviewed and possibly reconsidered.

The policy will provide a balanced federal approach to fish habitat management and will outline implementation procedures and other considerations. The policy will call on all Canadians to conserve, restore and develop the productive capacity of fish habitats that support the nation's fisheries resources. The determined pursuit of these three goals, within the framework of fish habitat management area planning, will enable the Department of Fisheries and Oceans to achieve a **net gain** of productive habitats for selected fisheries resources in support of stock restoration and enhancement targets. The policy will be implemented by the department, in cooperation and consultation with government, industry and other groups, using a series of nine strategies that, together with the six procedural steps of a working principle, will enable implementation to proceed smoothly.

In implementing the first goal of habitat conservation, the department will prevent damage to the habitats of the country's fisheries resources by:

- (a) recognizing the legitimate interests of other levels of government and the private sector.
- (b) allowing for consideration of opposing views before decisions are taken.
- (c) following clear procedures to avoid delays in the review and approval of project proposals.
- (d) making full use of technical fact and professional judgement in reaching decisions on large and small projects.
- (e) administering and enforcing the habitat protection provisions of the Fisheries Act to achieve **no net loss** of the productive capacity of habitats supporting Canada's fisheries.

In the case of development projects and activities that may impair the productive capacity of habitats, the use of habitat replacement and fish production compensation to overcome predicted losses may be approved, provided project design, operation and relocation options to avoid or mitigate potential damage have been exhausted, and the steps are consistent with the department's fish stock management objectives. Projects that are likely to result in residual damage to fish habitat from any source (chemical, physical or biological), where such damage cannot be overcome by the approach just outlined, will require thorough review, assessment and public consultation, before approval will be considered by the Minister of Fisheries and Oceans.

The department's second and third goals are to restore habitats that have suffered damage and to increase the productive capacity of other habitats to achieve a **net gain** for selected fisheries. These goals provide for increased socio-economic benefits, including employment; encourage community and private sector involvement; and provide scope for the application of scientific and technical findings.

A strategy of consultative resource planning would enable the department to seek opportunities to resolve multiple resource use conflicts affecting fisheries resources by participating in resource planning and management with other agencies and natural resource users. In this context, the department will be prepared to discover and take positive steps to accommodate the concerns of other resource interests. The department will also be prepared to enter into agreements with others to achieve mutually agreeable resource planning and management objectives.

Finally, the department will consult the public on major or controversial fish habitat issues. The first preference will be to participate fully in the public review procedures of other government agencies, provided that an opportunity will be provided for all aspects of fisheries concerns to be addressed. In cases where the Minister of Fisheries and Oceans requires a measure of control over the public review process, two options will be considered: (a) joint sponsorship arrangements with another Minister, or (b) legally constituted federal public reviews.

CHAPTER ONE

Introduction

The policy framework for fish habitat management outlined in this document was developed by the Department of Fisheries and Oceans following public consideration of a discussion paper during a seven-month period of external consultation across Canada in 1983-84. In the course of this consultative process it became clear that new procedures were needed to accommodate opposing views before habitat decisions are taken; that streamlined approval procedures were needed for major projects; that both technical fact and professional judgement were crucial in reaching decisions; that fair treatment must be given to small and large projects; and that natural resources planning, in consultation with others, is an important tool for fish habitat management.

The Department of Fisheries and Oceans recognizes the potential impact of fish habitat decisions on regional development, industrial development and public projects and will strive under this policy to take reasonable and consistent decisions to protect productive fish habitat.

1.1 The Need for a Policy

In many parts of Canada, fish stocks have disappeared or are under pressure as the result of two factors: we have overfished them, and often we have let their habitats be damaged and destroyed. The story is a familiar one and the result is always the same, especially for freshwater and anadromous fisheries: fewer fish and fewer benefits to Canadians.

Fish habitats constitute healthy production systems for the nation's fisheries and if they are not functioning well, Canada's fish stocks will diminish and some will disappear. This document provides interested Canadians with a statement of Fisheries and Oceans' policy respecting the conservation, restoration and development of fish habitats, and the department's plans to achieve these goals. This policy also provides objective statements against which the department may measure its performance in fish habitat management.

In his Report on Pacific Fisheries Policy in 1982, Commissioner Dr. Peter Pearse

concluded that "we will need a strong and comprehensive habitat management policy", in order to protect the environment supporting Pacific fisheries. This need was also recognized internally by departmental working groups investigating fish habitat management programs on both the east and west coasts. Other interests ranging from the industrial sector to resource management agencies to public conservation groups have also asked Fisheries and Oceans for a clear statement of policy on this important subject.

1.2 Scope and Intent

This policy is about fish habitats and the Fisheries and Oceans' program to conserve, restore and develop them. Under the Fisheries Act, "fish habitats" are defined as those parts of the natural environment "on which fish depend, directly or indirectly, in order to carry out their life processes". The Act also defines "fish" to include all the life stages of "fish, shellfish, crustaceans and marine animals". Accordingly, pursuant to the Act, this policy will apply to all

projects and activities, large and small, in or near the water, that have the potential to "alter, disrupt or destroy" fish habitats, thereby undermining the economic, employment and other benefits that flow from Canada's fisheries resources.

This should not be interpreted to mean that the policy will be applied indiscriminately to all fish habitats in the country. However, it will apply to habitats supporting "fisheries resources" as defined in this document: i.e. "fish stocks or populations that sustain commercial, recreational or native fishing activities of benefit to Canadians". In addition, Fisheries and Oceans recognizes its responsibility to protect fish stocks and habitats that have the potential to sustain beneficial fishing activities.

While the policy does recognize the legitimate needs of other water users, it is not intended to be either an "environment" policy, or a "water management" policy. The scope is confined to the habitat requirements for fish, not the water quality standards for recreation, or the water quantity requirements for transportation.

It follows that the application of this policy will be primarily in freshwaters, estuaries and coastal situations where most damage to fish habitats has taken place and where the potential for future damage is highest. In the marine waters on Canada's continental shelves, the policy will provide general guidance, the main areas of interest being the surveillance and control of chemical hazards introduced, or that may be introduced, by man's activities; and control of the potential adverse effects of dredging, shipping and oil and gas resources exploitation activities.

This policy describes a long-term approach, signalling a renewed effort by Fisheries and Oceans to maintain and, where possible, increase the social and economic benefits derived by Canadians from the productive

capacity of fish habitats and the fisheries resources they support.

1.3 Fisheries Socio-Economic Benefits and Costs

Fish are an important part of Canada's renewable resource base. It is estimated that commercial and recreational fisheries contribute more than \$3 billion annually to the national economy. Fish and their habitats are a valuable tourist attraction, generating local income quite apart from fishing activities. There are also social benefits that flow from the fishery resource, such as support for traditional lifestyles in remote communities. In addition, to many Canadians, the simple knowledge that the fish are there serves as a strong indicator of a healthy environment. With wise management, this resource will continue to provide benefits to the nation in perpetuity.

The economic and social benefits of an effective fish habitat management program will be realized by Canadians in the medium and longer term. The direct benefits are to the fisheries, counted as pieces or pounds of wholesome fish caught, sold and eaten. There will also be indirect benefits, in aesthetic and recreational enjoyment, and in employment.

As described in Chapter 4, the department plans to implement a conceptual approach, called habitat management area planning, whereby habitat-related actions would be taken in accordance with the needs of the local fisheries and in keeping with fisheries stock production objectives. As this approach is implemented, it will allow for a much improved appreciation of the benefits to be derived from well-managed habitats, and of the costs to the fisheries if habitats are not protected.

1.4 The Federal Mandate for Fisheries

The Constitution Act (1982) assigns legislative responsibility for Canada's sea coast and inland fisheries to the federal government. The fish habitat protection powers are contained in the federal Fisheries Act, for which the Minister of Fisheries and Oceans is accountable to Parliament. These provisions are summarized in the Annex to this policy, and outlined in a departmental publication entitled "Canada's Fish Habitat Law". These powers authorize the Minister to regulate and control activities that will disrupt, degrade or destroy the habitat of fish.

1.5 The Provincial Role in Fish Habitat Management

Following references to the Privy Council and several Court decisions, formal agreements were negotiated during the period 1899 and 1930 between the federal government and a number of provinces. As a result, the federal government made special arrangements concerning day-to-day management for all fisheries in the provinces of Ontario, Manitoba, Saskatchewan and Alberta, and for some fisheries in the provinces of Quebec (where the province manages freshwater and salmon fisheries), and British Columbia (where the province manages freshwater species, excepting salmon). In these six provinces (or areas thereof), federal fisheries legislation is administered by the provincial fisheries management agency, although provincial fisheries regulations must be promulgated by the federal government. Conservation Officers in many provinces are designated as Fishery Officers for purposes of administering the Act.

Notwithstanding the above, and recognizing that the habitat provisions of the Fisheries Act cannot be legally delegated to any province, negotiations will have to be held with each of the six provinces just mentioned to develop satisfactory administrative agreements. Federal authorities are prepared to assist their provincial counterparts wherever possible, and particularly in cases where federal-provincial agreements specifically require assistance.

The federal government has constitutional authority for all fisheries in Canada, and it retains direct management authority for fisheries in the Atlantic Provinces of Newfoundland, New Brunswick, Nova Scotia and Prince Edward Island; for the marine and anadromous salmon fisheries of British Columbia; for the marine fisheries of Quebec; and for the fisheries of the Yukon and Northwest Territories. In addition, the federal government will become involved in transboundary situations where undertakings in one province threaten fish habitat in another jurisdiction.

1.6 Recognizing other Priorities of Government

The Department of Fisheries and Oceans is keenly aware that the important priority areas of the federal government in the mid-1980's are economic development and employment. This policy will support the government's economic agenda and, in some circumstances, will serve to create employment.

The wise management of fish habitat supporting Canada's productive fisheries will ensure that the socio-economic benefits and employment generated by this sector are not undermined needlessly by actions in other economic sectors. Government,

private sector and citizen-initiated projects to restore degraded habitats will generate employment opportunities, often in job-poor areas. Furthermore, this policy will provide for the following:

- (i) a framework for improved priority-setting, local consultation and resource planning;
- (ii) streamlined departmental approval procedures for major projects;

- (iii) a commitment to improving cooperative arrangements with provinces and with the private sector;
- (iv) a process to provide habitat protection guidelines for projects in or near the water; and
- (v) a process whereby new projects may be accommodated by accepting alternatives to maintain the productive potential while permitting the project to proceed.

CHAPTER TWO THE POLICY

2.1 A Net Gain of Habitat for Selected Fisheries

The objective of this policy, as explained below, is to maintain the productive capacity of fish habitats, using a conservation goal guided by the working principle of **no net loss**. In addition, the policy recognizes that habitat restoration is needed to improve the natural production of fisheries in areas where past activities have reduced productivity.

The department also intends to take advantage of opportunities to develop and improve habitats in selected areas where benefits to the fisheries can be achieved by adding nutrients, regulating water flows, providing access to unused spawning grounds, and rearing areas, and other techniques.

The determined pursuit of these three approaches to conserve, restore and develop habitats, will enable the Department of Fisheries and Oceans to achieve a **net gain** of productive habitats for selected fisheries in Canada.

2.2 Policy Objective

FISH HABITAT CONSERVATION, RESTORATION AND DEVELOPMENT

Conserve, restore and develop fish habitats to maintain and improve the production of Canada's fisheries resources for the benefit of present and future generations.

2.3 The Three Goals

2.3.1 First Goal

FISH HABITAT CONSERVATION

Maintain the current productive capacity of fish habitats supporting Canada's fisheries resources.

Explanatory Notes:

1. The habitat conservation goal commits the department to maintain the current overall productive capacity of fish habitats on a fish stock-specific basis, in support of the nation's fisheries resources. The level of protection given to habitats will be based on their actual or potential contribution to sustaining these resources.
2. Where there is a risk of potential damage to habitat, the department will strive to prevent losses of natural fish production areas, in order to maintain genetic diversity and to produce fish in perpetuity. This will satisfy the department's fish production goals without unnecessarily incurring the costs and risks associated with fish production facilities.
3. The habitat sections of the Fisheries Act will be administered and enforced to control projects and activities that have a potential to alter, disrupt and destroy habitats.
4. The conservation goal will be implemented by using the **no net loss**

working principle and seven strategies (Figure 1): Protection and Compliance, Consultative Resource Planning, Research, Public Consultation, Public Information and Education, Community Involvement, and Monitoring.

2.3.2 Second Goal

FISH HABITAT RESTORATION

Restore the productive capacity of fish habitats in selected areas where economic or social benefits can be achieved through the fisheries resource.

Explanatory Notes:

1. Restoration of fish habitats will complement the preventive approach provided for in the first goal and will contribute significantly to the achievement of net gain for selected fisheries.
2. Restoration of the biological and chemical quality of water and repair of physically disrupted habitats will be achieved by enforcing pollution control laws, by applying suitable waste treatment technology, by rehabilitating streams, by controlling exotic predators, parasites, and competitors, by removing man-made and storm-related physical barriers, and by other measures.
3. The restoration goal will be implemented using the following five strategies: Consultative Resource Planning, Research, Public Information and Education, Community Involvement and especially, Habitat Rehabilitation.

2.3.3 Third Goal

FISH HABITAT DEVELOPMENT

Develop fish habitats in selected areas where the production of fisheries resources can be improved for the social and economic benefit of Canadians.

Explanatory Notes:

1. The productive capacity of habitats may be increased by manipulating naturally limiting chemical, physical, and biological factors, and creating or providing access to new spawning, rearing and food producing areas.
2. The objective of this goal is to generate national and regional economic and social benefits in the short and long term for Canadians, and to assist in achieving a net gain for selected fisheries.
3. The development goal will be implemented using the following three strategies: Research, Community Involvement and especially, Habitat Improvement.

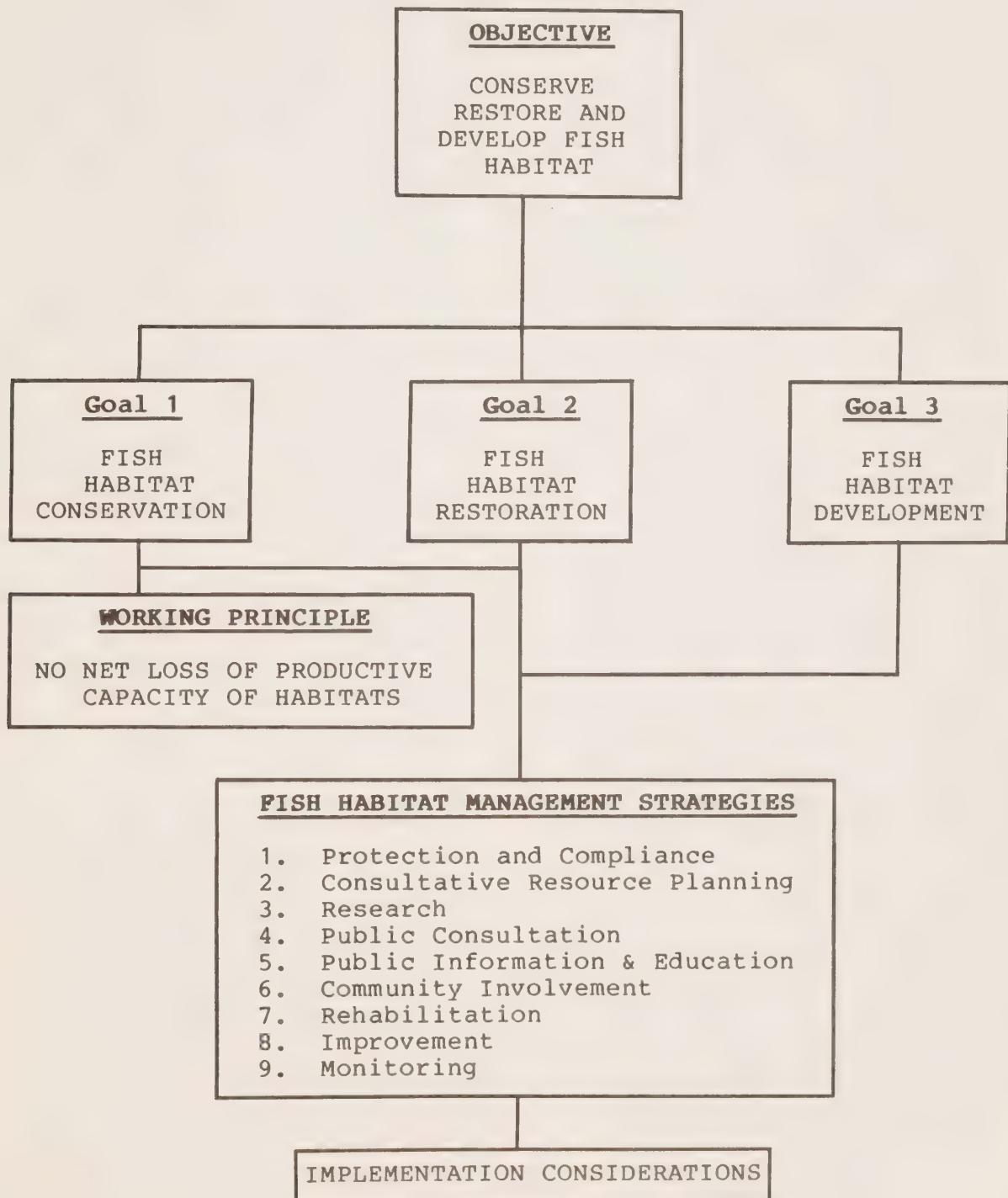
2.4 The Nine Strategies

2.4.1 First Strategy

PROTECTION AND COMPLIANCE

Protect fish habitats by administering the Fisheries Act and incorporating fish habitat protection requirements into land and water use activities and projects.

FIGURE 1
POLICY FRAMEWORK FOR FISH HABITAT MANAGEMENT



Explanatory Notes:

1. The no net loss working principle, as described in Chapter Three, is an integral part of this strategy.
2. The department will ensure a uniform and equitable level of compliance with statutes, regulations and policies, as necessary to manage and protect fish habitats. When voluntary compliance fails to produce the desired objective of maintaining the productive capacity of habitats, the department will enforce the legislation for which the Minister of Fisheries and Oceans is accountable.
3. Adverse effects on fish habitats frequently are avoided by the voluntary modification of the plans, designs and operating procedures for projects and activities.
4. The department will provide advice and specific requirements to any person, company or agency engaged in or responsible for work in or near the water, in an effort to control the potentially adverse effects on fish habitats of liquid effluent discharges, physical disturbances, and non-point-sources of chemical pollutants such as acid rain, pesticides and other environmental contaminants.

2.4.2 Second Strategy

CONSULTATIVE RESOURCE PLANNING

Participate in and encourage resource planning and management to incorporate fish habitat priorities into air, land and water use plans.

Explanatory Notes:

1. The department will seek opportunities to resolve multiple resource use conflicts affecting fisheries resources by participating in resource planning and management with other agencies and natural resource users, and by encouraging the mutual recognition of the mandate and objectives of all participants.
2. The department's objective will be to plan for the conservation, restoration and development of the fisheries resource and its supporting habitat, within the framework of fisheries stock management plans, where these have been developed.
3. The department will be prepared to seek ways and take positive steps to accommodate the concerns of other resource interests.
4. The department is prepared to enter into agreements with provincial and territorial agencies and natural resource users to achieve mutually agreeable resource planning and management objectives.

2.4.3 Third Strategy

SCIENTIFIC RESEARCH

Conduct scientific research to provide the information and technology necessary for the conservation, restoration and development of fish habitats.

Explanatory Notes:

1. The department will continue to carry out a broad program of scientific

research on Canada's fisheries, part of which will be directed toward achieving the following habitat-related objectives:

- (a) improve the understanding of the relationship between fish stocks and their habitats in order to identify vital habitat components and to provide a basis for remedial protection measures;
 - (b) determine the effects of human activities on fisheries resources and the habitats that support them;
 - (c) determine how adverse effects on fish habitat may be mitigated;
 - (d) develop and refine techniques to restore degraded habitats.
 - (e) develop an understanding of the productive capability of natural areas.
 - (f) develop improved methods of evaluating the economic and social worth of fish habitats, and provide risk-benefit and cost analyses relating to projects that could impact on fisheries.
2. The department will encourage and participate in cooperative habitat-related research programs with other federal government departments, provincial agencies, and industry groups and associations to improve knowledge in areas of common interest.
3. Habitat-related research priorities of the department will be established through consultative arrangements with fishery managers, habitat managers, and where appropriate, indus-

trial interests, government agencies, and the general public.

- 4. Habitat-related research findings by departmental scientists will be made public and reported in scientific and technical publications.

2.4.4 Fourth Strategy

PUBLIC CONSULTATION

Consult the public on major or controversial fish habitat issues and on the development of new policies and legislation for fish habitat management.

Explanatory Notes:

- 1. Of the thousands of projects and activities examined by Fisheries and Oceans across Canada each year, few will constitute a sufficiently high risk to fisheries or be of such high public concern as to require any special process for public consultation, other than normal consultation with the proponent.
- 2. Where it is determined by the Minister that an issue requires formal public consultation, the department's first preference will be to participate fully in the public review procedures of other government agencies, where appropriate encouraging the use of available procedures, such as the Federal Environmental Assessment and Review Process, provided their terms of reference fully address fisheries concerns.
- 3. In cases where the Minister of Fisheries and Oceans requires a

measure of control over the public review process, the following options will be considered: (a) joint sponsorship arrangements with another Minister, or (b) a federal public review under the Inquiries Act.

4. The department may decide to initiate informal public meetings to provide for the exchange of information, to receive public comment on departmental position statements, and to become informed about public concerns respecting a project under review.
5. The Minister will consider all views expressed in arriving at a decision, consistent with the responsibilities of government.

2.4.5 Fifth Strategy

PUBLIC INFORMATION AND EDUCATION

Promote public awareness in the conservation, restoration and development of fish habitats.

Explanatory Notes:

1. Strong public sentiment in support of habitat conservation, restoration and development will reduce the likelihood that habitat abuse will occur.
2. The department will foster increased public awareness of the importance of fish habitat and the threats to it by continuing to publish and distribute information material and technical guidelines; to produce films and other education

materials for public use, particularly in schools; and to sponsor conferences, seminars and symposia.

2.4.6 Sixth Strategy

COMMUNITY INVOLVEMENT

Encourage and support community involvement in the conservation, restoration and development of fish habitats.

Explanatory Notes:

1. Community involvement in habitat-related activities helps to instill positive attitudes and local pride in the fisheries resource and its habitat, and to raise the level of understanding about the complex relationship between the resource and its supporting habitats. Employment and economic benefits also can be realized by involving local communities in habitat-related work.
2. The department will seek opportunities across the country to involve community organizations and interested citizens in fish habitat restoration and development projects, and will provide technical guidance.

2.4.7 Seventh Strategy

HABITAT REHABILITATION

Rehabilitate the productive capacity of degraded habitats either through direct government action or in cooperation with others.

Explanatory Notes:

1. To help achieve a net gain for selected fisheries, the department will support habitat rehabilitation projects using government funds, when such funds are available, and where economic and employment benefits can be achieved through the fisheries resource.
2. The department will encourage outside interests to undertake projects to rehabilitate habitats in degraded areas.
3. In cases where there is demonstrated damage to fish habitats resulting from the deposit of untreated or inadequately treated liquid wastes, the department will advocate prescribing more stringent effluent quality and monitoring requirements in order to rehabilitate biological productivity.
4. Where fish habitats can be rehabilitated from the adverse effects of pollutants from any source, the department will provide advice on fisheries protection requirements and will consult and cooperate with provincial, municipal and regional planning authorities.
5. The department will provide technical advice and guidance to community and conservation groups that express interest in rehabilitating habitats; financial support also may be provided, depending on the availability of public funds for this purpose.

2.4.8 Eighth Strategy

HABITAT IMPROVEMENT

Invest in activities to increase the natural productive capacity

of fish habitats when proven techniques are available and the initiative is judged to be economically feasible or socially desirable.

Explanatory Notes:

1. The department will seek the release of public funds to undertake habitat improvement projects in support of stock management objectives, using reliable methods, when feasibility studies demonstrate that the economic and social benefits outweigh the costs.
2. This strategy requires the continuing support of scientific research to discover and test new methods for increasing the productive capacity of fish habitats.

2.4.9 Ninth Strategy

HABITAT MONITORING

Evaluate the effectiveness of decisions taken and techniques used to conserve, restore and develop fish habitats.

Explanatory Notes:

1. Recognizing the limited ability to predict confidently changes to fish habitats arising from proposed actions, the department will rely increasingly on the results of monitoring the effects, both during and after development. In this way the effectiveness of departmentally-prescribed conditions of approval, intended to maintain the productive capacity of fish habitats, may be evaluated.

2. Project proponents may be required to undertake follow-up monitoring studies on the effectiveness of habitat mitigation and compensation prescriptions as a condition of project approval by the department.
3. Studies of the biophysical components of habitats to determine baseline conditions and the effects of change, and to establish environmental trends, may be undertaken by the department as part of its in- house programs of scientific research and other investigations.
4. The department may carry out project-related effects and compliance monitoring and surveillance on a selected basis.
5. The results of monitoring studies will be used by the department to determine the need for changes in mitigation and compensation requirements. Proponents may be required to modify the prescribed habitat protection measures, based on the monitoring results.

CHAPTER THREE

NO NET LOSS OF PRODUCTIVE CAPACITY: A WORKING PRINCIPLE FOR PROPOSED WORKS AND UNDERTAKINGS

3.1 Definition

In support of the habitat conservation goal, strive to balance unavoidable habitat losses with habitat replacement on a project-by-project basis so that further reductions to Canada's fisheries resources due to habitat loss or damage may be prevented.

Explanatory Notes:

1. The working principle is meant to guide personnel of the Department of Fisheries and Oceans who are responsible for habitat management activities. The principle should not be interpreted as a statutory requirement to be met at all costs and in all circumstances. But professional judgement and common sense applied by experienced personnel trained in habitat management, combined with supportive research in an informed, cooperative environment, will achieve no net loss of productive capacity in the majority of cases.
2. Through the hierarchy of preferences explained below in this chapter, the principle offers flexibility to both fisheries managers and the proponents of works and undertakings that may threaten fish habitats.
3. The department will give due consideration to the economic benefits and costs associated with the development of alternative solutions to achieve no net loss of productive capacity.
4. The working principle will not be applied on a retroactive basis to existing works and undertakings that were originally examined and approved by the department.
5. The working principle will take into consideration the habitat requirements of an affected fish stock, in conjunction with site-specific evaluations, in order to avoid losses of habitats or habitat components that can limit the production of fish stocks that are or have the potential to be part of Canada's commercial, recreational or food fisheries.
6. The working principle is specifically intended as a guide for implementing the habitat conservation goal. Habitat rehabilitation and improvement techniques may be employed to achieve no net loss and the conservation goal, but the actual goals of restoration and development will be pursued independently, as a means of achieving a net gain for selected fisheries.

3.2 Procedures to Apply the Working Principle

The working principle signals a renewed effort by the Department of Fisheries and Oceans to ensure that the social and economic benefits derived by Canadians from the productive capacity of fish habitats and the fisheries resources they support do not disappear over time. Application of this working principle would not mean that all works and undertakings in or near water would have to be stopped, or

that unreasonable measures would be imposed on their design, construction and operation. For example, liquid wastes would continue to be discharged into Canada's fisheries waters after suitable treatment to reduce harmful effects; marinas and port developments would proceed using acceptable locations and designs; and mineral exploitation and many land and water use practices would take place under environmental controls designed to protect fisheries. As a matter of good practice however, each development would have to be evaluated in the planning phase to determine if its impact on fish habitat would reduce the capability of that habitat to sustain fisheries resources.

3.2.1 Hierarchy of Preferences: When the fishery resource is put at risk by a proposed development project or activity, the department will follow a hierarchy of preferences to achieve **no net loss** of productive capacity. Stock management objectives will always be a major consideration for the department in deciding where to draw the line in the process of selecting any offsetting proposals designed to achieve **no net loss**.

1. The first preference of the department will be to maintain the natural productive capacity of the habitat(s) in question by avoiding any loss or disruption at the site. This may be achieved by encouraging the proponent to redesign the project, to select an alternate site, or to mitigate potential damages using reliable techniques.
2. If it proves to be impossible or impractical to maintain the same level of habitat productive capacity by selection of an alternate site or by using mitigation techniques, then compensatory options might be explored. First of all, the possibilities for replacing natural habitat would be identified. If this proves not to be

feasible, then secondly it might be possible to consider increasing the productivity of existing habitat.

3. As a final, "last resort" option, the department would consider proposals to compensate-in-kind in the form of artificial production to supplement the affected stock provided the following conditions are met:
 - (a) such a solution will be in accordance with the objectives established in the local stock management plan,
 - (b) genetic and other biological factors are satisfied, and,
 - (c) practical and proven techniques are available.
4. Cash will not be considered as an acceptable form of compensation.
5. Final decisions on questions relating to mitigation and compensation will be taken by officials of the Department of Fisheries and Oceans, following consultation with proponents, and subject to the decision review procedures explained later in Section 4.10. In any event, however, where avoidance, mitigation and compensation measures cannot be implemented to avoid losses to the productive capacity of habitats, no decision to proceed with the project in question will be taken by the Minister of Fisheries and Oceans without public consultation and a thorough review and assessment of all factors.

In cases where the department has to advise a proponent that the work or undertaking is unacceptable, evidence to support the following conclusions will be considered:

- (i) that despite the best efforts to control adverse effects, unavoidable

habitat destruction will take place if the project proceeds, and

- (ii) that this loss of habitat will cause significant harm to fisheries resources.

In other cases, there may be overwhelming uncertainty forecasting the potential effects on fish habitats and the fisheries resources. Should the proponent reject the department's advice and proceed with the work or undertaking, then the department will seek a court injunction to stop the action until the dispute can be resolved.

To apply the working principle and achieve the habitat conservation goal, the department will follow a strategy of protection and compliance, in accordance with a series of six steps (Fig. 2). These steps have general applicability to works and undertakings of any size, although it is recognized that the larger the project, the more time and effort will be required to complete steps II, III and V.

3.2.2 Step I - Notification: Information and requests for departmental approval of works or undertakings in or near the water will come to the attention of the department in the following ways: (a) public announcement of the project, (b) inquiries from concerned citizens, (c) inquiries from the proponent, and (d) through established inter-agency referral systems (see Section 4.3 for more information on referral systems).

3.2.3 Step II - Examination: Once information on a proposal is received, the department should undertake a detailed examination of the potential implications of the work or undertaking to the fisheries resource. Obtaining and presenting relevant information on the project, and on the

fish habitat that is likely to be affected, will be the responsibility of the proponent under section 33.1(1) of the Fisheries Act (see section 4.9 of the policy for more information). This step will take varying amounts of time to complete, depending on the size of the project, and it will be in the interest of proponents to provide assessments on a timely basis.

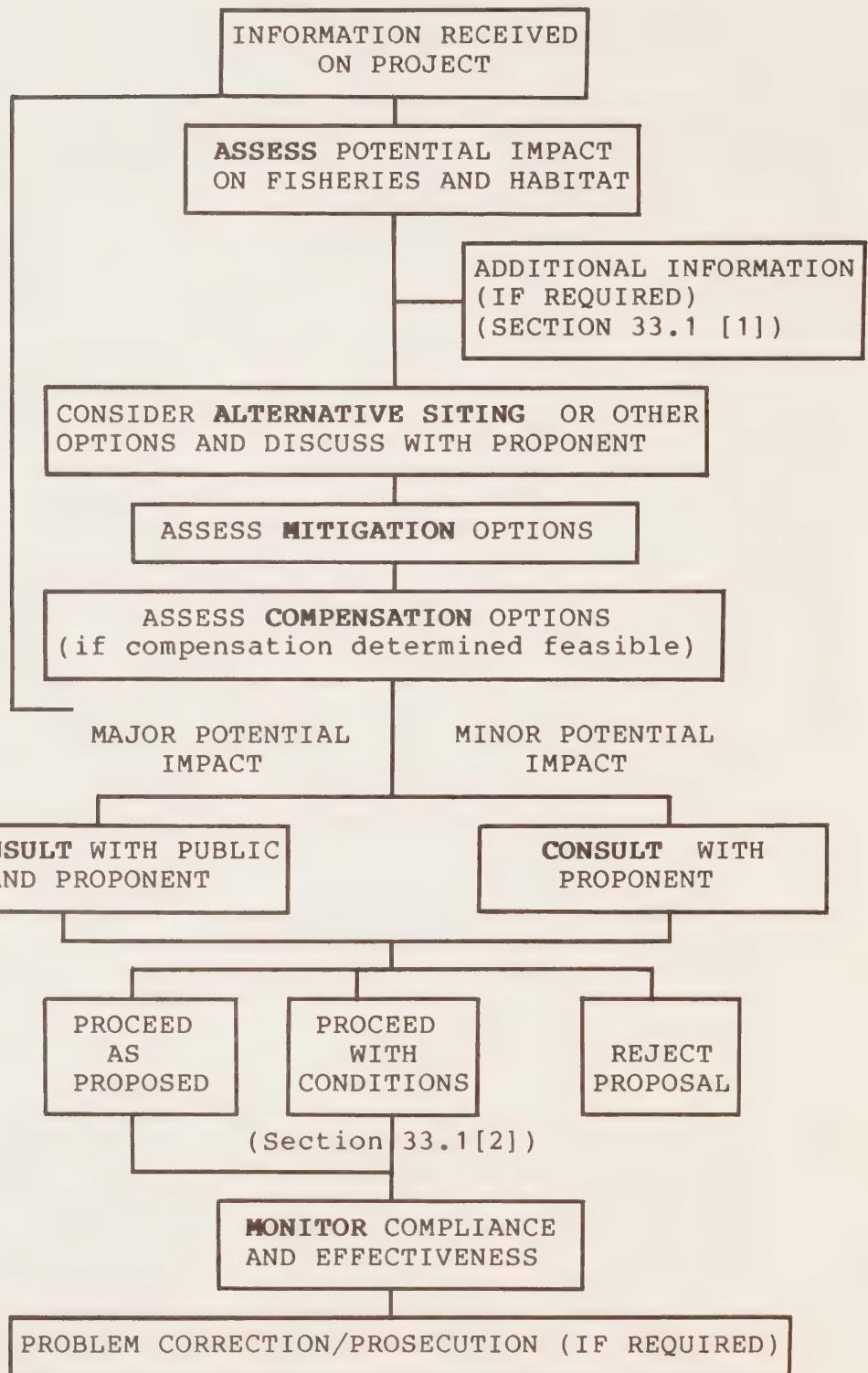
As part of the examination step, the hierarchy of preferences (section 3.2.1) would be followed; the amount of detail and time required will depend again on the size of the work or undertaking, and its potential impact on fish habitats.

3.2.4 Step III - Public Consultation: The department recognizes the need to provide opportunities for public review and input to decisions on developments that have broad social, economic or environmental implications. More information on the department's approach to public consultation may be found in section 2.4.4 of this policy.

3.2.5 Step IV - Decision: Following its examination of the proposed work or undertaking and the results of any public consultation, the department will decide whether the project is likely to result in a net loss of productive habitat capacity. If a loss is likely, the department will then have to decide if the proponent's plans to mitigate or compensate are acceptable. Where adequate scientific and technical knowledge to predict impacts or to prescribe mitigation or compensation solutions is neither available nor attainable, the department will take a conservative approach, possibly leading to more stringent requirements being placed

FIGURE 2
PROCEDURAL STEPS TO ACHIEVE NO NET LOSS

STEP I
NOTIFICATION
BY PROPOSER



on the proponents, in order to reduce risks to the productive capacity of habitats.

Depending on the outcome of these deliberations, the department could decide directly, or through a recommendation to the Minister in cases involving major developments:

- i) to permit the proposal to proceed as proposed (no harm expected to the productive capacity of fish habitat),
- ii) to permit the proposal to proceed with conditions (often with respect to schedule, methods, equipment, environmental control and mitigation measures, compensation, follow-up monitoring and training of personnel), or

- iii) to reject the proposal (potential losses to the fisheries judged unacceptable).

3.2.6 Step V - Audit: As explained in Section 2.4.9 of this policy, the department will ensure that compliance monitoring and effectiveness evaluation are undertaken.

3.2.7 Step VI - Enforcement: The department will enforce the legislation for which the Minister of Fisheries and Oceans is accountable, as explained in Sections 2.4.1 (Protection and Compliance) and 4.5 (Use of the Fisheries Act) of this policy.

CHAPTER FOUR IMPLEMENTATION CONSIDERATIONS

4.1 Accounting for Results

The performance of any government program must be measured against clear policy goals and expected program results. Habitat management is no exception and the Department of Fisheries and Oceans is taking steps to improve program management in the following ways:

1. At the national level, goals for habitat management will be identified when this policy document is approved and released by the Minister of Fisheries and Oceans.
2. In the Pacific Region (British Columbia and Yukon), a significant portion of the department's habitat program capability has been decentralized to locations outside Vancouver. Plans are being prepared to determine priorities for fish habitat management, and there is increased cooperation with the Province of British Columbia on natural resource inventories and joint planning for resource management.
3. In the Atlantic Regions, fish habitat program needs have been formally reviewed and a number of recommendations for improvement are being considered for implementation.
4. The department is in the process of developing and testing a conceptual model for improved management of fish habitat program activities and for the identification of expected program results. Under this model, a mechanism called Habitat Management Area Planning has been proposed (see next sub-section for more details).
5. The department recognizes that many of its regions are not in a position, with respect to financial and human resources, to fully implement the goals of this policy immediately. Accordingly, a national plan and timetable will be developed by the department for a phased program of policy implementation, giving due consideration to regional needs for habitat management.

4.1.1 Habitat Management Area Planning:

Under this concept, a geographic area, supporting one or more fish stocks, would be designated for planning purposes and the departmental managers with responsibilities for fisheries and habitat activities in the area would prepare a program plan. The essential building block for this plan would be a clear description of the fisheries resources to be managed and the determination of management objectives for the various stocks. This would be coupled with an identification of the habitat requirements of those resources and the actual and potential threats to the bio-physical environment supporting the fisheries. Using this information, habitat conservation, restoration and development priorities and expected results would be established, consultation with private sector interests in the area would take place, and accountable fisheries managers would be identified to carry out the work.

It is hoped that the main elements of this concept will be put in place by the department by 1987, subject to the availability of program resources to carry out the work.

4.2 Guidelines and Training

Habitat management program activities in the Department of Fisheries and Oceans are carried out by personnel who are trained in a number of areas: fisheries science, fisheries technology, resource economics, resource management and enforcement. Professional development training may be provided on a limited basis by the department at any of these levels.

Job-related technical and resource management training programs are provided by the department for enforcement officers whose responsibilities include habitat management. This type of training has been offered in several regions of the department for many years, and it was first offered at a national level for new recruits in 1983.

Fisheries and Oceans will develop a plan to prepare and publish the following guidebooks, in an effort to improve the department's ability to administer the habitat provisions of the Fisheries Act, using **no net loss** as a working principle:

1. A Guide to Achieving **no net loss**.
2. Mitigation Guides, by Activity.
3. Assessment Procedures for Evaluating Fish Habitat.
4. Fish Habitat and Fish Stock Sensitivity Mapping.
5. Restoration and Development Guidelines.
6. Preparing Habitat Management Area Plans.

4.3 Referral Mechanisms

The department currently relies on a number of inter-agency project referral systems for the purpose of becoming aware of works and undertakings that may have an impact on fish habitats. Should action be

required by the department to protect habitats, it is carried out either directly under the Fisheries Act, or indirectly through the powers of another government agency. These referral systems serve to improve government inter-agency communication and to streamline the approval process for proponents.

Where referrals are found to be deficient due to the lack of cooperation, the department will consider instituting project authorization systems under federal fisheries regulations. This would be done only as a procedure of last resort and the department will continue to try to make currently active referral systems work.

4.4 Cooperative Arrangements

The department is prepared to enter into cooperative arrangements with various groups, organizations and other government agencies, in order to achieve fisheries and habitat management objectives. The implementation of all the goals and strategies outlined in this policy would be assisted by cooperative actions between the department and other interested groups.

Opportunities for the forest industry to become involved in self-regulation initiatives are being pursued in British Columbia. The department, in concert with provincial agencies, is developing an approach whereby interested companies would use their own environmental staff to protect fish habitat during forest harvesting operations, using departmental guidelines, and be subject to departmental surveillance and audit.

On another front, the department has expressed an interest in establishing a mechanism such as a national committee or foundation to enable industry and other non-government groups to come together

with departmental representatives in order to focus attention on solving fish habitat protection problems and on restoring and developing habitats. In their comments on the department's 1983 Discussion Paper on Habitat Management, several industrial groups acknowledged the potential benefits of increasing private sector participation in habitat matters. The department intends to pursue this.

Similarly, the department is aware that there are many opportunities across the country to build on the existing good working relations that exist with other levels of government, and private citizen groups and associations. These cooperative arrangements can be especially productive for subjects such as referral systems, inventory data banks, various forms of consultative resource planning, public consultation and review of projects, effects monitoring, the creation of sanctuaries, and the restoration of habitats. The department is prepared to enter into discussions in an effort to improve working relations.

Many activities administered by the provinces and territories, such as logging, road construction, water and land management, and agricultural and urban development, can have negative effects on fish and their habitat if the developments are not properly planned and managed. In areas where the federal government administers the fish habitat provisions, the department will participate with the provinces, territories and other federal departments in reviewing plans for such activities to resolve resource conflicts involving fish habitat. In areas where the federal government is not directly involved in fish habitat administration, the department is prepared to provide advice to the provinces.

4.5 Use of the Fisheries Act

In administering the Fisheries Act, the department prefers to prevent damage to habitat and avoid losses to the fisheries resource, rather than to punish offenders after the fact. However, when it is contravened and fish habitat is altered, destroyed or degraded, enforcement officers of the department will carry out enforcement action. Decisions to take such action will be based on the importance of the habitat in question in supporting Canada's fisheries resources, among other factors.

The Act contains powers to deal with damage to fish habitat, destruction of fish, obstruction of fish passage, minimum flow requirements and the screening of water intakes. In addition, comprehensive powers are provided in Section 33 for controlling the release of deleterious substances into fish habitats. Such substances degrade water quality, thereby reducing fish production potential and often killing fish. Section 33 is administered by Environment Canada on behalf of Fisheries and Oceans, under a Memorandum of Understanding signed in May, 1985.

Before enforcement action is taken, enforcement officers will make every reasonable effort to consult with the person or persons involved. If necessary, the Governor-in-Council may make formal orders under Section 33.1(2) to modify, restrict or close works or undertakings. Before recommending such action, however, the Minister of Fisheries and Oceans would offer to consult with colleagues in other interested federal departments and with the government of any province or territory that may be affected. In emergency situations where a violation

violation is observed and the offending party refuses to discontinue the action causing the violation, a court injunction may be requested under Sections 31(4) and 33(9) to halt the work or undertaking.

Private citizens may initiate prosecutions under the habitat provisions of the Act. The department will examine the circumstances surrounding each litigation and consider supporting the action only if it can be justified in terms of fisheries resource management objectives.

The federal government is also responsible, in areas where it manages the fisheries, for investigating fish kills and ensuring that corrective action is taken. Alleged violators of the Act will be prosecuted when the evidence warrants. Where discharges of deleterious substances are detected that present an immediate threat to fisheries, and no other government agency has initiated action, departmental staff will intervene directly, using the general prohibition powers of Section 33 to stop the discharge as quickly as possible and to arrange for clean-up.

4.6 Approval Procedures for Major Projects

There are a number of projects such as mining and hydro developments, and other major industrial undertakings that have the potential to cause serious damage to productive fish habitats. Projects of this nature require detailed examination by the Department of Fisheries and Oceans under the habitat protection provisions of the Fisheries Act.

The department recognizes the importance of timely approvals in the context of minimizing costs, assisting economic growth and providing new employment opportuni-

ties. Accordingly, it will take the following steps to expedite approvals:

- (a) For major projects a senior level Policy Steering Committee chaired by an Assistant Deputy Minister will provide overall guidance and direction respecting the department's actions by
 - (i) meeting with project proponents, senior representatives of other government agencies and other interested parties,
 - (ii) receiving reports and briefings from departmental technical staff, and
 - (iii) recommending approval, restrictions and prohibitions to the Deputy Minister.
- (b) A technical task force will be formed by the department for each major project to
 - (i) establish contact at the working level with the proponent and with officials of other departments and levels of government,
 - (ii) outline the department's technical information requirements,
 - (iii) review project assessments and environmental control proposals,
 - (iv) prepare deficiency statements,
 - (v) provide conclusions and recommendations on habitat management considerations of the project to the DFO Policy Steering Committee, and
 - (vi) carry out follow-up work as required.

4.7 Policy Application to "Small" Projects

This policy is intended to apply to projects of any scale so that cumulative losses of habitats are avoided and the productive capacity of habitats is maintained in support of Canada's fisheries resources.

The department is confident that the policy can be applied to "small" projects by actively pursuing the following:

- (a) Using inter-agency referral systems for the notification and review of all types and sizes of project;
- (b) Encouraging the general public to report local fish habitat concerns to the department for follow-up action;
- (c) Distributing guidelines on the mitigation of damage to fish habitats from various activities; and
- (d) Assigning certain responsibilities for habitat protection and compliance to local departmental area and district offices.

4.8 The Control of Water Pollution

The Minister of Fisheries and Oceans remains accountable to Parliament for all parts of the Fisheries Act. With respect to the control of deleterious substances under Section 33 of the Act, however, Environment Canada acts on behalf of Fisheries and Oceans under a 1985 Memorandum of Understanding to carry out the federal responsibilities for protecting fish from pollution discharges.

Other departments and levels of government also have a legislative responsibility for water pollution control that can be com-

plementary to efforts of the Department of Fisheries and Oceans to protect fish and fish habitat from the effects of pollution. Accordingly, both Fisheries and Oceans and Environment Canada coordinate their activities with those of the provinces, territories and other federal agencies.

The department will continue to cooperate with Environment Canada, Transport Canada, Energy, Mines and Resources, and Indian and Northern Affairs, in efforts to control marine pollution under the Ocean Dumping Control Act, the Canada Shipping Act, the Arctic Waters Pollution Prevention Act, the Navigable Waters Protection Act, and the Oil and Gas Production and Conservation Act.

4.9 Proponent Responsibilities

A majority of governments in Canada, including the federal government, have adopted the principle that the "proponent pays" for the costs of assessment studies, mitigation and compensatory actions associated with projects and activities. The following points will assist in clarifying the department's policy on the division of responsibilities between government and the private sector for providing studies:

- (a) Pursuant to Section 33.1(1) of the Fisheries Act, proponents are responsible for providing an assessment of the potential impact of their works and undertakings on the fisheries resource. The assessment must include project-specific information on the resource in question and its supporting habitat. The terms of reference for such assessments should be developed by the proponent, in consultation with professional and technical staff of Fisheries and Oceans. To avoid delays in the approval of projects, it is in the interest of proponents to provide these assessments on a timely basis.

(b) Fish stock assessments and habitat-related field investigations are carried out by the department on a regional basis for purposes of managing the fisheries. The results of these studies may be used by proponents to supplement the project-specific information.

(c) In the context of large projects, where the government lacks baseline fisheries information, and such information is required to assess the potential impact of a proposed work or undertaking, the Minister may require the proponent to obtain the data pursuant to Section 33.1 (1) of the Act.

(d) The cost of mitigating any anticipated damages and for implementing and operating any compensation measures designed to avoid losses of fish habitat and reductions in the supply of fish will be the responsibility of proponents.

(e) Generic, non-project-specific research on fish habitat is carried out by Fisheries and Oceans. For example, the department conducts research on the lethal and sublethal effects of various chemical contaminants on fish, the effects of various forest harvesting practices on the productive capacity of fish habitats, and the relationship between habitat requirements and fish stock productivity.

(f) The department may provide technical advice to assist in the resolution of relatively minor habitat problems associated with small projects.

(g) The costs to government of operations undertaken to clean up spills of oil and other pollutants will be recovered, under Section 33(10) of the Fisheries Act, from the person(s) who caused the damage.

4.10 Review of DFO Habitat Decisions

Should a person feel aggrieved by a habitat-related decision made by departmental staff, that person may at any time request a review of the decision by the Minister of Fisheries and Oceans.

As an alternative, project proponents may request reviews of decisions on habitat-related matters, at senior management levels within the department, including Regional Directors-General and the Deputy Minister. Guidelines for the conduct of these reviews are under consideration by the department.

In the event of an unresolved dispute about a habitat decision regarding a major project, the parties may agree to refer the project to an independent body or panel for study and recommendations.

4.11 Cash as Compensation

The department has concluded that, in order to meet its fisheries management objectives, it would not be appropriate to accept cash as compensation for habitat damage and loss. The department's objective is to maintain the supply of fish for the current and future users of the resource, and to avoid situations where a source of fish is significantly altered, thereby affecting the livelihood and enjoyment of Canadians who had come to depend on that source of fish. Acceptance of cash would signify that the project or activity had been given approval to proceed without full mitigation or compensation, and that habitat losses would therefore take place in a particular area, affecting a specific stock of fish.

4.12 Fish Habitat Sanctuaries

The Department of Fisheries and Oceans favours the selection and setting aside of unique areas essential for the production of fisheries resources.

Section 44 and the regulations under Section 34 of the Fisheries Act contain limited powers that enable the Minister of Fisheries and Oceans to close for fishing any river or other water for the natural propagation of fish. Any initiative to establish fish habitat sanctuaries, thereby placing restrictions on other resource or industrial developments, would be taken by the department in close cooperation with the province or territory concerned, and with land owners, citizen's groups and private corporations.

4.13 Native Rights to Fisheries

Fish habitat management is one of the department's concerns in the context of native land claims negotiations. Fisheries and Oceans will insist on assurances, as part of any land claim agreement, that fish habitats will be maintained in a manner consistent with approved or agreed upon fish production objectives.

The department is prepared to cooperate with native groups on the development of programs, techniques and approaches to habitat management.

4.14 International Fish Habitat Issues

The fish habitat management program serves the objectives of more than just the federal fisheries program. The habitat management program helps to fulfill Canada's commitment to the United Nations' World Conservation Strategy, part of which calls for the maintenance of the support systems for fisheries and for the control of pollution. In accord with this philosophy, Canada had earlier pressed for a strong Law of the Sea, in order for this country to be better able to manage and control marine pollution.

The department will continue to address concerns for fish habitat management in international forums whose mandates have a bearing on fish habitat objectives. The International Joint Commission and the Great Lakes Fishery Commission will be supported in addressing bilateral issues, such as the restoration of salmon on the St. Croix River, New Brunswick, and the clean-up of the Great Lakes. The department will continue to provide advice, through the Department of Transport, to the International Maritime Organization (IMO) on the subject of hazardous cargoes at sea, and other marine transport related environmental issues. The department will continue to provide technical and policy input to the Canadian position at the London Dumping Convention. The department will also continue to cooperate with both the Organization for Economic Cooperation and Development (OECD) and the International Council for the Exploration of the Sea (ICES) in their efforts to coordinate international research and monitoring programs.

ANNEX

THE FEDERAL MANDATE

Under the Constitution Act (1982), the federal government has legislative responsibility for Canada's fisheries. The Minister of Fisheries and Oceans has been assigned responsibility for sea coast and inland fisheries, marine science and administration of the Fisheries Act. A key component of the Minister's overall responsibility for fisheries management is the protection of fish and fish habitat from disruptive and destructive activities. Fisheries and oceanographic research provide, among their outputs, the knowledge required for sound fish habitat management.

The habitat protection provisions of the Fisheries Act provide the Minister of Fisheries and Oceans with the following powers (see the departmental publication "Canada's Fish Habitat Law" for more information):

- Section 20 The authority to require the construction, maintenance and operation of fish passage facilities at obstructions in rivers; to require financial support for fish hatchery establishments constructed and operated to maintain runs of migratory fish; to remove unused obstructions to fish passage; and to require a sufficient flow of water at all times below an obstruction for the safety of fish and the flooding of spawning grounds.
- Section 28 The authority to require the installation and maintenance of screens or guards to prevent the passage of fish into water intakes, ditches, canals and channels.
- Section 30 The authority to prohibit the destruction of fish by any means other than fishing.
- Section 31 The authority to modify, restrict or prohibit any work or undertaking which is likely to result in the harmful alteration, disruption or destruction of fish habitat, a term that is defined in subsection 31 (5) of the Act.
- Section 33 Comprehensive powers to protect fish and fish habitat from the discharge of deleterious substances; to request plans for developments that may affect fish; to develop regulations and to modify, restrict or prohibit certain works or undertakings.
- Other Sections:** Definitions, penalties and additional powers are provided in Sections 31(3), 33.1(9), 33.4(1), 34, 52, 53, 55 and 56, among others.

Fishery Regulations specific to provinces and territories are made pursuant to the Fisheries Act, and some of these contain habitat protection sections. The department is also responsible for administration of the Great Lakes Fisheries Convention Act, which provides for Canada - U.S. rehabilitation of the Great Lakes.

GLOSSARY

Canadian Fisheries Waters	"All waters in the fishing zones of Canada, all waters in the territorial sea of Canada and all international waters of Canada." (<u>Fisheries Act</u> , sec. 2)
Compensation for Loss	The replacement of natural habitat, increase in the productivity of existing habitat, or maintenance of fish production by artificial means in circumstances dictated by social and economic conditions, where mitigation techniques and other measures are not adequate to maintain productive fish stocks.
Conservation (of habitats)	The planned management of human activities that might affect fish habitats to prevent destruction and subsequent loss of fisheries benefits.
Development (of habitats)	The creation of fish habitat and the enhancement or other improvement (such as flow regulation, nutrient addition, provision of access to spawning and rearing areas, etc.) applied to any type of fish habitat to provide better conditions for production and maintenance of the fisheries resource.
Fish	"includes shellfish, crustaceans, marine animals, and the eggs, spawn, spat and juvenile stages of fish, shellfish, crustaceans and marine animals." (<u>Fisheries Act</u> , sec. 2).
Fish Habitats	"Spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes." (<u>Fisheries Act</u> , sec. 31.5).
Fish Habitat Management Program	Those activities, legislative responsibilities and policies administered by the Department of Fisheries and Oceans for the purpose of conserving, restoring and developing the productive capacity of habitats for the fisheries resources.
Fisheries Resources	Fish stocks or populations that sustain commercial, recreational or native fishing activities of benefit to Canadians.
Mitigation	Actions taken during the planning, design, construction and operation of works and undertakings to alleviate potential adverse effects on the productive capacity of fish habitats.

Net Gain	An increase in habitats for selected fisheries brought about by determined government and public efforts to conserve, restore and develop habitats.
No Net Loss	A working principle by which the department strives to balance unavoidable habitat losses with habitat replacement on a project-by-project basis so that further reductions to Canada's fisheries resources due to habitat loss or damage may be prevented.
Productive capacity	The quantity of fish that is normally produced by unimpaired habitats under natural conditions.
Protection (of habitats)	Prescribing guidelines and conditions, and enforcing laws for the purpose of preventing the alteration, destruction or disruption of fish habitat.
Restoration (of habitats)	The treatment or clean-up of fish habitat that has been altered, disrupted or degraded for the purpose of increasing its capability to sustain a productive fisheries resource.

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